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5

PRELIMINARY AMENDMENT

APPLICANTS: Michael Horn et al. DOCKET NO: 112740-301
SERIAL NO: GROUP ART UNIT:
EXAMINER:
INTERNATIONAL APPLICATION NO: PCT/DE01/01219
10 INTERNATIONAL FILING DATE: 30 March 2001
INVENTION: ELECTRONIC PAYMENT METHOD AND SYSTEM

Assistant Commissioner for Patents
Washington, DC 20231

15

PRELIMINARY AMENDMENT

Sir:

Please amend the above-identified International Application before entry
into the National stage before the U.S. Patent and Trademark Office under 35
20 U.S.C. §371 as follows:

In the Specification:

Please replace the Specification of the present application, including the
Abstract, with the following Substitute Specification:

SPECIFICATION

25

TITLE OF THE INVENTION**ELECTRONIC PAYMENT METHOD AND SYSTEM****BACKGROUND OF THE INVENTION**

The present invention relates to an electronic payment method and system
for paying for merchandise or a service over a data network which can essentially
30 proceed in real time.

Besides its use as a source of communication and a source of information
for what has now become hundreds of millions of people, the Internet is becoming
increasingly important as a source of shopping. Particularly, trade in software,

books and travel is already being carried out on the Internet in a significant proportion today, but also a broad spectrum of other goods and services is increasingly being ordered and paid for over the Internet. Paying for the relevant services on the Internet in the manner which was established originally and is still generally widespread today requires the relevant data records to be entered separately in each case, at least by each party to the transaction, if not even for the individual transaction. This mode of payment, thus, allows the party to the transaction to see sensitive personal data and even to store them permanently.

The Internet has now also become considerably important for handling other payment operations in the business and private sectors. Virtually all banks in industrial states offer electronic handling of account management and of payment operations in the form of "electronic banking".

Nevertheless, the majority of payment operations in day-to-day life are, even today, still performed by using cash or by providing transfer or direct debit orders or the like in writing, or by credit card or check card. In specific areas, for example that of mobile radio technology, electronic credits ("prepaid cards") have also become significant, but considerable obstacles prevent this payment procedure from being introduced on a widespread basis.

Altogether, it is noted that, in the current state of development, there are an extremely confusing large number of options for paying for goods or services, and using these options in day-to-day life requires considerable alertness and a wide variety of media and modes of entry to be dealt with. This is demanding and is associated with diverse security risks (losing data media or credit media, forgetting account data and authentication codes, etc.).

Besides the Internet, telecommunications (in particular, mobile telecommunications) today represents an area of rapid technical and economic development and a significant source of economic growth and new social developments. For a large number of people in industrial states, the mobile telephone ("mobile") is increasingly becoming a universal communication and information instrument and is increasingly being used to access goods and services. This development is also still hindered by insufficient opportunities for reliable and,

at the same time, simple payment for information, goods and services ordered using a mobile.

Although solutions exist which allow the user of a mobile - with or without a prepaid card - to authorize payments, which are then processed in a conventional manner by debit procedures or credit card debiting, these methods presuppose, as
5 do payment processing procedures which have now been introduced on the Internet, that the purchaser is creditworthy and has authority to use a credit card or a current account with an overdraft facility. In addition, these
procedures have inherent time lags which have a disadvantageous effect on the
10 transparency and reliability of the overall processing.

The present invention is, therefore, directed toward a method and system for simplified processing of payment transactions using a data network.

SUMMARY OF THE INVENTION

The present invention encompasses the fundamental concept of using a
15 prepaid electronic credit (the term "prepaid" having been introduced on a general basis), such as is already in widespread use today for paying for mobile radio services. It also encompasses the concept of transferring part of such a prepaid credit, which may be implemented on a special smart card or else on another memory in a telecommunication or data network, to an electronic target account
20 belonging to a supplier of merchandise or a service to the amount of a sum required for paying for the merchandise or service.

From the point of view of the greatest possible security for the customer or purchaser, and bearing in mind legal provisions for the banking industry, an intermediate step of transfer to an electronic interim account belonging to the
25 purchaser is performed in this context.

The method can be used, in particular, for payment processing in the B2C (Business-to-Consumer) sector and, in this case, particularly for shopping in virtual shops and for "micropayments" or content charging (paying minimal sums for information/pieces of music or the like) on the Internet. In principle, it can also be
30 used for paying for goods in real shops or for services in the field of catering, culture or sport and also for using merchandise dispensing machines.

As a real-time method, the proposed method affords improved transparency and reliability as compared with known payment processing methods. In addition, it can also be used, in particular, by people who have not been granted a credit facility. The user need merely have a prepaid credit ensuring sufficient coverage of the envisaged transfer of money. Another important advantage, particularly for users of electronic commerce (e-commerce or m-commerce) who have relatively low income, is the good cost control.

Additional features and advantages of the present invention are described in, and will be apparent from, the following Detailed Description of the Invention and the Figures.

BRIEF DESCRIPTION OF THE FIGURES

Figure 1 shows, in block diagram form, the system to which the electronic payment method of the present invention is performed.

DETAILED DESCRIPTION OF THE INVENTION

In the description below and in the patent claims, the holder of the prepaid credit wishing to transfer a sum of money and entering a (real or virtual) shop as a purchaser and entering a catering establishment as a guest is referred to as the "purchaser". The receiver of the sum of money to be transferred is referred to below as the "vendor". In addition, receivers and senders of money may also be applications.

In the preferred embodiment of the proposed solution, the prepaid electronic credit is managed on a special server in the data network or, in particular, a telecommunication network which can be connected thereto; specifically, independently of its physical appearance to the user (card, terminal with a permanently built-in memory, or the like). This server is also referred to below as the prepaid server in order to illustrate its function graphically.

This is advantageous to the extent that, for this embodiment, an established infrastructure already exists in the mobile radio networks and with the providers, and broad user groups are already well versed in the use of prepaid credits in the mobile radio sector. In principle, prepaid credits also can be used in the landline network, however.

The target account of the vendor is expediently managed on an account management server implemented directly in the data network used as the basic infrastructure; that is to say, in practice, on the Internet. The interim account of the purchaser is also managed on such an account management server, possibly on the same one as the target account of the vendor. The latter variant simplifies the connection setup and data transfer which are required for the transactions. In practice, however, it is more likely to be the exception due to the wide variety of service providers on the market. The account management server(s) is (are) also referred to as (an) eWallet server(s) below, due to its (their) function of providing an "electronic wallet".

The functions required for processing the transaction are provided by a special application server which, on the basis of its special function, can be referred to as the payment server. The connecting and checking operations crucial for performing the transaction are also carried out on the payment server. These procedures have a multiplicity of conceivable variants which are described in the explanations below merely using examples which are advantageous from today's angle, but are not dealt with exhaustively.

A central function of the payment server is to check authentication and/or account data, transmitted by the purchaser when initiating the transaction, on the basis of customer data stored in the network; specifically, in the home location register (HLR) of a mobile radio network. Another fundamental checking function is checking the current level of the prepaid credit with respect to the sum which needs to be transferred to pay for the required merchandise or service.

Within the context of setting up the connections required for the transaction, the payment server sets up, in particular, a connection to the prepaid server in order to ascertain the existence of a prepaid credit and the level thereof on prepaid server. It also sets up a connection or connections to the eWallet server or eWallet servers on which the interim and target accounts are managed, in order to use these connections to transmit the data to implement the electronic transfer operation. Finally, the payment server needs to maintain the telecommunication link (originally set up from the terminal of the purchaser), and possibly set it up again in

order to transmit a completion acknowledgment, for the purposes of data entry under menu guidance, and optionally also needs to set up a connection to the terminal of the vendor in order to transmit a completion acknowledgment to him.

In addition, the payment server runs the software for controlling
5 communication with the terminal of the purchaser, in particular under visual or voice-controlled menu guidance, and optionally with the terminal of the vendor; in particular, for the purposes of transaction acknowledgment.

The explanations above also reveal the fundamental functional components of a system suitable for implementing the present invention. As such, it is not
10 necessary to describe the system aspects of the present invention in detail again at this point. In particular, it is evident that, besides the fundamental network infrastructure, in particular, a combined data and telecommunication network, it is necessary to have servers on which the prepaid credit and the accounts and the application software are managed, and the purchaser needs to have a terminal for
15 initiating the transaction and for entering the relevant data.

In terms of the number of servers performing the transaction and their division of functions, however, the conceivable variants are just as different as for involving the vendor (with or without a separate terminal) in the actual payment operation and for the components used for acknowledging payment.

The preferred embodiment of the present invention is described in more
20 detail below with reference to the single figure, the individual steps being symbolized in the figure by circles containing numerals. In contrast to the names above, in this case the purchaser is referred to as the "sender" and the vendor (in this case as the operator of a virtual shop e-shop) is referred to as the "receiver". A
25 combined telecommunication and data network is simply referred to as NETWORK in this case. The interim account of the purchaser (sender) and the target account of the vendor (receiver) are each referred to as an eWallet. The other names are in line with the explanations of terms given further above.

The sequence of the method of the present invention is as follows:

30 1. The sender uses his/her mobile radio terminal to set up a connection to the receiver (e.g., e-shop), whose merchandise is held on a merchandise server

and is handled using a data terminal associated with the vendor, and wishes to take advantage of (purchase) the product(s) on offer.

2. After the product(s) has (have) been selected and the desire to make a purchase has been confirmed (by data communication between the terminals of the purchaser and of the vendor), in which case the receiver has notified the sender of his/her eWallet account number, a connection is automatically set up between the sender and the payment server. In this process, the eWallet account number of the receiver is also transmitted to the payment server.

3. Menu guidance displayed on the sender's terminal display or else conveyed in audible form requests the sender to authenticate himself/herself with the payment server. By doing this, the accounts of the sender can also be clearly identified.

4. Since the sender has a prepaid account, he/she is offered prepaid as a payment option. The sender decides on prepaid and enters the payment sum.

5. The payment server checks with the prepaid server to determine whether the prepaid account indicated exists and whether the sum indicated is available in the account.

6. If this is the case, the sum is transferred to the eWallet account of the sender on the eWallet server.

7./8. Next, the sum is debited from the eWallet account of the sender, and the sum is credited to the eWallet account of the receiver. (The intermediate step using the eWallet account of the sender may, possibly, be omitted. The intermediate step is particularly useful when an existing electronic payment method on the Internet which, by way of example, uses special coding methods to produce electronic coins, is to be involved). Money is transferred in real time.

9. The sender receives an acknowledgment about the successful transfer of money.

10. The receiver is informed about the receipt of the sum of money in his/her eWallet account.

Although the present invention as been described with reference to specific embodiments, those of skill in the art will recognize that changes may be made

thereto without departing from the spirit and scope of the invention as set forth in the hereafter appended claims.

ABSTRACT OF THE DISCLOSURE

An electronic payment method and system for paying for merchandise or a service offered by a vendor and ordered by a purchaser over a data or tele-communication network using a prepaid electronic credit, essentially in real time, over the network, where a predetermined credit sum required for paying for the merchandise or service is transferred, in response to a transfer signal transmitted by a first terminal associated with the purchaser, to an electronic interim account belonging to the purchaser, in particular after intervening transfer by a debit signal, to an electronic target account belonging to the vendor.

In the claims:

On page 9, cancel line 1 and substitute the following left-hand justified heading therefore:

15 CLAIMS

Please cancel claims 1-14, without prejudice, and substitute the following claims therefore:

15. An electronic payment method for paying for merchandise or a service offered by a vendor and ordered by a purchaser over a network, which is one of a data network and a telecommunications network, using a prepaid electronic credit, substantially in real time, over the network, the method comprising the steps of:

transmitting a transfer signal by a first terminal associated with a purchaser;
transferring, in response to the transfer signal transmitted by the first terminal, a predetermined credit sum required for paying for the merchandise or the service to an electronic interim account belonging to the purchaser; and
transferring, after intervening transfer by a debit signal, the credit sum to an electronic target account belonging to the vendor.

30

16. An electronic payment method as claimed in claim 15, the method further comprising the steps of:

managing the prepaid electronic credit on a credit management server in the network; and

5 implementing a piece of credit transfer software on an application server in the network.

17. An electronic payment method as claimed in claim 15, the method further comprising the step of:

10 managing the electronic interim account on an account management server in the network.

18. An electronic payment method as claimed in claim 17, the method further comprising the step of:

15 managing the electronic target account on an account management server in the network, which is the same account management server that manages the interim account.

19. An electronic payment method as claimed in claim 16, the method further comprising the steps of:

20 setting up a connection between the first terminal and the application server after the merchandise or service has been ordered and automatically in response to an acknowledgement signal fixing the order;

transferring to the application server, after the connection has been set up, an account identifier for the target account of the vendor, at least one of an authentication code and an account identifier for the interim account, a credit
25 identifier for the prepaid credit of the purchaser, and the predetermined credit sum;

checking all data received on the application server;

transferring the credit sum, if the result of the check is positive, from the prepaid credit to the interim account of the purchaser and from the purchaser
30 onward to the target account of the vendor; and

creating a log record of the transfer operations.

20. An electronic payment method as claimed in claim 19, wherein the method is carried out as a combined mobile radio and data transfer, entries by the vendor being made in the form of one of keyboard and voice entries on a mobile
5 radio terminal under menu guidance provided by the application server.

21. An electronic payment method as claimed in claim 19, the method further comprising the step of:

transmitting a respective acknowledgment signal about completion
10 of the electronic transaction to the purchaser and to the vendor after a transfer has been made.

22. An electronic payment method as claimed in claim 15, the method further comprising the step of:

15 providing the electronic interim account of the purchaser within a context of a subscription to a shopping service and with an operator of an account management server, wherein the purchaser is allocated an authentication code.

23. An electronic payment method as claimed in claim 22, wherein the
20 allocated authentication code simultaneously represents a credit identifier for the prepaid credit and an account identifier for the interim account.

24. A data transmission system for paying for merchandise or a service offered by a vendor and ordered by a purchaser over a network, which is one of a
25 data network and a telecommunications network, using a prepaid electronic credit, substantially in real time, over the network, the system comprising:

a credit memory, managed on a credit management server, for storing the prepaid electronic credit;

an interim account memory on an account management server;

30 a target account memory on one of the account management server and a further account management server;

an application server having credit transfer software implemented thereon;

a first terminal associated with a purchaser for entering credit and account identifiers and a payment initiation signal; and

5 a network connection between the first terminal, the credit management server, one of the account management server and the further account management server, and the application server for implementing a data transfer process therebetween, and for implementing an electronic transfer.

10 25. A data transmission system as claimed in claim 24, wherein the first terminal is a mobile radio terminal connected to a mobile radio network, and the prepaid credit is stored on a prepaid card of the mobile radio network.

15 26. A data transmission system as claimed in claim 24, further comprising:

a second data terminal associated with the vendor, which is connected to the network directly or via a telephone land line network, for receiving the payment initiation signal and, optionally, an acknowledgement signal about the completion of the electronic payment operation.

20 27. A data transmission system as claimed in claim 24, wherein the application server has an authentication code memory and a comparator unit, connected at an input, for comparing an authentication code, received from the first terminal, with a stored authentication code and for outputting an enable signal for
25 the payment operation if there is a match between the authentication code received from the first terminal and the stored authentication code.

30 28. A data transmission system as claimed in claim 27, wherein the application server has a decoding unit for obtaining at least one of a credit and an account identifier for one of the prepaid electronic credit and the interim account from the authentication code.

REMARKS

The present amendment makes editorial changes and corrects typographical errors in the specification, which includes the Abstract, in order to conform the specification to the requirements of United States Patent Practice. No new matter is added thereby.

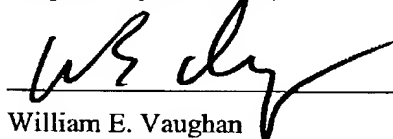
Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned **"Versions with Markings to Show Changes Made."**

In addition, the present amendment cancels original claims 1-14 in favor of new claims 15-28. Claims 15-28 have been presented solely because the revisions by crossing out underlining which would have been necessary in claims 1-14 in order to present those claims in accordance with preferred United States Patent Practice would have been too extensive, and thus would have been too burdensome.

The present amendment is intended for clarification purposes only and not for substantial reasons related to patentability pursuant to 35 U.S.C. §§101, 102, 103 or 112. Indeed, the cancellation of claims 1-14 does not constitute an intent on the part of the Applicants to surrender any of the subject matter of claims 1-14.

Early consideration on the merits is respectfully requested.

Respectfully submitted,



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VERSIONS WITH MARKINGS TO SHOW CHANGES MADE

SPECIFICATION

TITLE OF THE INVENTION

ELECTRONIC PAYMENT METHOD AND SYSTEM

BACKGROUND OF THE INVENTION

Description

~~Electronic payment method and arrangement for carrying it out~~

The present invention relates to an electronic payment method and system for paying for merchandise or a service over a data network which can essentially proceed in real time, ~~and to a corresponding arrangement.~~

Besides ~~for its~~ use as a means source of communication and a source of information for what has now become hundreds of millions of people, the Internet is becoming increasingly important as a source of shopping. Particularly, trade in software, books and travel is already being carried out on the Internet in a significant proportion today, but also a broad spectrum of other goods and services is increasingly being ordered and paid for over the Internet. Paying for the relevant services on the Internet in the manner which was established originally and is still generally widespread today requires the relevant data records to be entered separately in each case, at least by each party to the transaction, if not even for the individual transaction. This mode of payment, thus, allows the party to the transaction to see sensitive personal data and even to store them permanently.

The Internet has now also become considerably important for handling other payment operations in the business and private sectors. Virtually all banks in industrial states offer electronic handling of account management and of payment operations in the form of "electronic banking".

Nevertheless, the majority of payment operations in day-to-day life are, even today, still performed by using cash or by providing transfer or direct debit orders or the like in writing, or by credit card or check card. In specific areas, for example that of mobile radio technology, electronic credits ("prepaid cards") have also become significant, but considerable obstacles prevent this ~~means of~~ payment procedure from being introduced on a widespread basis.

Altogether, it ~~can be stated~~ is noted that, in the current state of development, there are an extremely confusing large number of options for paying for goods or services, and using ~~said~~ these options in day-to-day life requires considerable alertness and ~~requires~~ a wide variety of media and modes of entry to be dealt with.

- 5 This is demanding and is ~~also~~ associated with diverse security risks (losing data media or credit media, forgetting account data and authentication codes, etc.).

Besides the Internet, telecommunications ~~-(in particular, mobile telecommunications-)~~ today represents an area of rapid technical and economic development and a significant source of economic growth and new social
10 developments. For a large number of the people in industrial states, the mobile telephone ("mobile") is increasingly becoming a universal communication and information instrument and is ~~also~~ increasingly being used to access goods and services. This development is also still hindered by insufficient opportunities for reliable and, at the same time, simple payment for information, goods and services
15 ordered using a mobile.

Although solutions exist which allow the user of a mobile - with or without a prepaid card - to authorize payments, which are then processed in a conventional manner by debit procedures or credit card debiting, these methods presuppose, as
20 do payment processing procedures which have now been introduced on the Internet, that the purchaser is creditworthy and has authority to use a credit card or a current account with an overdraft facility. In addition, these procedures have inherent time lags which have a disadvantageous effect on the transparency and reliability of the overall processing.

The present invention is, therefore ~~based on the object of specifying,~~
25 directed toward a method and ~~an arrangement system~~ for simplified processing of payment transactions using a data network.

~~This object is achieved in terms of its method aspect by a method having the features of claim 1, and in terms of its apparatus aspect by an arrangement having the features of claim 10.~~

SUMMARY OF THE INVENTION

The present invention encompasses the fundamental concept of using a prepaid electronic credit (the term "prepaid" having been introduced on a general basis), such as is already in widespread use today for paying for mobile radio services. It also encompasses the concept of transferring part of such a prepaid credit, which may be implemented on a special smart card or else on another memory in a telecommunication or data network, to an electronic target account belonging to a supplier of merchandise or a service to the amount of a sum required for paying for the merchandise or service.

From the point of view of the greatest possible security for the customer or purchaser, and bearing in mind legal provisions for the banking industry, an intermediate step of transfer to an electronic interim account belonging to the purchaser is performed in this context.

The method can be used, in particular, for payment processing in the B2C (Business-to-Consumer) sector -and, in this case, particularly for shopping in virtual shops and for "micropayments" or content charging (paying minimal sums for information/pieces of music or the like) on the Internet, ~~but in.~~ In principle, it can also be used for paying for goods in real shops or for services in the field of catering, culture or sport and also for using merchandise dispensing machines.

As a real-time method, the proposed method affords improved transparency and reliability as compared with known payment processing methods. In addition, it can also be used, in particular, by people who have not been granted a credit facility. The user need merely have a prepaid credit ensuring sufficient coverage of the envisaged transfer of money. Another important advantage, particularly for users of electronic commerce (e-commerce or m-commerce) who have relatively low income, is the good cost control.

Additional features and advantages of the present invention are described in, and will be apparent from, the following Detailed Description of the Invention and the Figures.

BRIEF DESCRIPTION OF THE FIGURES

Figure 1 shows, in block diagram form, the system to which the electronic payment method of the present invention is performed.

DETAILED DESCRIPTION OF THE INVENTION

5 In the description below and in the patent claims, the holder of the prepaid credit wishing to transfer a sum of money and entering a (real or virtual) shop as a purchaser and entering a catering establishment as a guest is referred to as the "purchaser". The receiver of the sum of money to be transferred is referred to below as the "vendor". In addition, receivers and senders of money may also be
10 applications.

In the preferred embodiment of the proposed solution, the prepaid electronic credit is managed on a special server in the data network or-, in particular-, a telecommunication network which can be connected thereto; specifically,
15 independently of its physical appearance to the user (card, terminal with a permanently built-in memory, or the like). This server is also referred to below as the prepaid server in order to illustrate its function graphically.

This is advantageous to the extent that, for this embodiment, an established infrastructure already exists in the mobile radio networks and with the providers, and broad user groups are already well versed in the use of prepaid credits in the
20 mobile radio sector. In principle, prepaid credits ~~can~~ also can be used in the landline network, however.

The target account of the vendor is expediently managed on an account management server implemented directly in the data network used as the basic infrastructure; that is to say, in practice, on the Internet. The interim account of the
25 purchaser is also managed on such an account management server, possibly on the same one as the target account of the vendor. The latter variant simplifies the connection setup and data transfer which are required for the transactions. In practice, however, it is more likely to be the exception ~~on account of~~ due to the wide variety of service providers on the market. The account management
30 server(s) is (are) also referred to as (an) eWallet server(s) below, ~~on account of~~ due to its (their) function of providing an "electronic wallet".

The functions required for processing the transaction are provided by a special application server which, on the basis of its special function, can be referred to as the payment server. The connecting and checking operations crucial for performing the transaction are also carried out on the payment server. These
5 procedures have a multiplicity of conceivable variants which are described in the explanations below merely using examples which are advantageous from today's angle, but are not dealt with exhaustively.

A central function of the payment server is to check authentication and/or account data, transmitted by the purchaser when initiating the transaction, on the
10 basis of customer data stored in the network-; specifically, in the home location register (HLR) of a mobile radio network. Another fundamental checking function is checking the current level of the prepaid credit with respect to the sum which needs to be transferred to pay for the required merchandise or service.

Within the context of setting up the connections required for the transaction,
15 the payment server sets up, in particular, a connection to the prepaid server in order to ascertain the existence of a prepaid credit and the level thereof on said prepaid server. It also sets up a connection or connections to the eWallet server or eWallet servers on which the interim and target accounts are managed, in order to use these connections to transmit the data to implement the electronic transfer operation.

20 Finally, the payment server needs to maintain the telecommunication link (originally set up from the terminal of the purchaser)-, and possibly set it up again in order to transmit a completion acknowledgment-, for the purposes of data entry under menu guidance, and optionally also needs to set up a connection to the terminal of the vendor in order to transmit a completion acknowledgment to him.

25 In addition, the payment server runs the software for controlling communication with the terminal of the purchaser, in particular under visual or voice-controlled menu guidance, and -optionally -with the terminal of the vendor-, in particular, for the purposes of transaction acknowledgment.

The explanations above also reveal the fundamental functional components
30 of ~~an arrangement~~ a system suitable for implementing the present invention, ~~which means that.~~ As such, it is not necessary to describe the ~~arrangement~~ system aspects

of the present invention in detail again at this point. In particular, it is evident that, besides the fundamental network infrastructure-, in particular, a combined data and telecommunication network-, it is necessary to have servers on which the prepaid credit and the accounts and the application software are managed, and the purchaser
5 needs to have a terminal for initiating the transaction
and for entering the relevant data.

In terms of the number of servers performing the transaction and their division of functions, however, the conceivable variants are just as different as for involving the vendor (with or without a separate terminal) in the actual payment
10 operation and for the components used for acknowledging payment.

A The preferred embodiment of the present invention is described in more detail below with reference to the single figure, the individual steps being symbolized in the figure by circles containing numerals. In contrast to the names above, in this case the purchaser is referred to as the "sender" and the vendor -(in
15 this case as the operator of a virtual shop e-shop-) is referred to as the "receiver". A combined telecommunication and data network is simply referred to as NETWORK in this case. The interim account of the purchaser (sender) and the target account of the vendor (receiver) are each referred to as an eWallet. The other names are in line with the explanations of terms given further above.

20 The sequence of the method of the present invention is as follows:

1. The sender uses his his/her mobile radio terminal to set up a connection to the receiver (e.g., e-shop), whose merchandise is held on a merchandise server and is handled using a data terminal associated with the vendor, and wishes to take advantage of (purchase) the product(s) on offer.

25 2. After the product(s) has (have) been selected and the desire to make a purchase has been confirmed (by data communication between the terminals of the purchaser and of the vendor), in which case the receiver has notified the sender of his his/her eWallet account number, a connection is automatically set up between the sender and the payment server. In this process, the eWallet account number of
30 the receiver is also transmitted to the payment server.

3. Menu guidance displayed on the sender's terminal display or else conveyed in audible form requests the sender to authenticate ~~himself~~ himself/herself with the payment server. By doing this, the accounts of the sender can also be clearly identified.

5 4. Since the sender has a prepaid account, he he/she is offered prepaid as a payment option. The sender decides on prepaid and enters the payment sum.

5. The payment server checks with the prepaid server to determine whether the prepaid account indicated exists and whether the sum indicated is available in the account.

10 6. If this is the case, the sum is transferred to the eWallet account of the sender on the eWallet server.

7./8. Next, the sum is debited from the eWallet account of the sender, and the sum is credited to the eWallet account of the receiver. (The intermediate step using the eWallet account of the sender may, possibly, be omitted. The
15 intermediate step is particularly useful when an existing electronic payment method on the Internet which, by way of example, uses special coding methods to produce electronic coins, is to be involved). Money is transferred in real time.

9. The sender receives an acknowledgment about the successful transfer of money.

20 10. The receiver is informed about the receipt of the sum of money in ~~his eWallet account.~~ his/her eWallet account.

Although the present invention as been described with reference to specific embodiments, those of skill in the art will recognize that changes may be made thereto without departing from the spirit and scope of the invention as set forth in
25 the hereafter appended claims.

ABSTRACT OF THE DISCLOSURE

Abstract

Electronic payment method and arrangement for carrying it out

- 5 An electronic payment method and system for paying for merchandise or a service offered by a vendor and ordered by a purchaser over a data or tele-communication network using a prepaid electronic credit, essentially in real time, over the network, where a predetermined credit sum required for paying for the merchandise or service is transferred, in response to a transfer signal transmitted by a first terminal associated with the purchaser, to an electronic interim account
- 10 belonging to the purchaser, in particular after intervening transfer by a debit signal, to an electronic target account belonging to the vendor.

Figure